

PERCENTAGES

Percentage Is Defined as:

- A proportion in one-hundredths; a proportion of a group or set
 - This is another way of representing a part of a whole (ex: fraction, decimal, and now percentage)



Hey, we use one-hundredths for money, every cent is like a single percentage!

Compare Money and Percent:

- 100% means we have everything, 100 out of 100 or:
 - Fraction: $100/100$
 - Decimal: 1.00
 - Money: \$1.00
- What about 50%?
 - We have 50 out of 100
 - Fraction: $50/100$
 - Decimal: 0.5
 - Money: \$0.50

One Quarter and Any Other Fractions

- ◎ We have many ways of writing one quarter now:
 - Fraction: $\frac{1}{4}$ of a dollar
 - Decimal: 0.25
 - Money: \$0.25 or 25 Cents
 - Percent: 25% of a dollar
- ◎ Any fraction can be written as a decimal, and a percent out of 100

How to transfer from a Decimal to a Percent

Start with a decimal:

0.56

Multiply the decimal
by 100

0.56×100

And get:

56%

Typical Response:

“Is there an easier way of doing this?”

YES!

Take the decimal place, and move it two places to the right

0.56



56%

Percentages can be written as Decimals

Start with a percentage

56%

Divide by 100

$56\% \div 100$

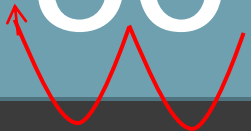
And get:

0.56

Can also move the decimal

Start with a percentage

Move the decimal two places to the left



56%

0.56

We can find a percentage of a number

We must remember that in mathematics the word “of” means to multiply

of

=

x

This means we must multiply

First: Set up the equation:

$$35\% \times 200$$

But we cannot multiply yet

First you must change the percentage to a decimal.

$$35\% \times 200$$

=

$$0.35 \times 200$$

=

70

Try a couple:

40% of 200

60% of 300

20% of 700